

-- 37. A method for donning and doffing a suction suspension prosthesis, said prosthesis including a suction socket having an open proximal end for receiving a residual limb and a distal end, comprising influencing air pressure between said residual limb and said distal end of said suction socket, decreasing the air pressure to a negative pressure to draw said residual limb into said suction socket or increasing the air pressure to a positive pressure to expel said residual limb from said suction socket. --

B' -- 38. A method for donning and doffing a suction suspension prosthesis, said prosthesis including a suction socket having an open proximal end for receiving a residual limb and a distal end, comprising influencing air pressure between said residual limb and said distal end of said suction socket, decreasing the air pressure to a negative pressure to draw said residual limb into said suction socket and increasing the air pressure to a positive pressure to expel said residual limb from said suction socket. --

-- 39. The method according to claim 38, further comprising lubricating said residual limb prior to insertion of said residual limb into said suction socket.

-- 40. A method for donning a suction suspension prosthesis, said prosthesis including a suction socket having an open proximal end for receiving a residual limb and a distal end, comprising:

(a) installing a valve means into said distal end of said suction socket, said valve means engaging a first end of a piece of tubing;

(b) lubricating said residual limb to obtain a lubricated limb;

(c) positioning said residual limb into said open proximal end of said suction socket; and

(d) drawing air through a second end of said tubing by means of a low pressure vacuum pump to create a negative pressure between said residual limb and said distal end of said suction socket such that said residual limb is pulled into full engagement within said suction socket. --

-- 41. The method according to claim 40, wherein said valve means comprises a quick release valve for connection to a valve body. --

Done.
-- 42. A method for doffing a suction suspension prosthesis, said prosthesis including a suction socket having a proximal end in which is received a residual limb and a distal end, comprising:

(a) installing a valve means into said distal end of said suction socket, said valve means engaging a piece of tubing; and

(b) introducing air through a second end of said tubing to create a positive air pressure between said residual limb and said distal end of said suction socket such that said residual limb is pushed out of said suction socket. --

REQUEST FOR INTERFERENCE

Pursuant to 37 C.F.R. §1.607(a)(1) the applicant respectfully requests that an interference be declared between the present application and U.S. Pat. No. 5,658,353 to Layton (the "Layton Patent"), issued Aug. 19, 1997. The applicant also requests that the present application be accorded the benefit of U.S. Pat. Application Ser. No. 08/516,557, filed August 18, 1995, thereby making the applicant the **senior party** in the interference. In declaring the interference, all the claims of the Layton Patent should be designated as corresponding to the proposed counts.

Pursuant to 37 C.F.R. §1.607(a)(2) the applicant proposes the following counts:

Count 1. A method for donning and doffing a suction suspension prosthesis, said prosthesis including a suction socket having an open proximal end for receiving a residual limb and a distal end, comprising influencing air pressure between said residual limb and said distal end of said suction socket, decreasing the air pressure to a negative pressure to draw said residual limb into said suction socket or increasing the air pressure to a positive pressure to expel said residual limb from said suction socket.

Count 2. A method for donning and doffing a suction suspension prosthesis, said prosthesis including a suction socket having an open proximal end for receiving a residual limb and a distal end, comprising influencing air pressure between said residual limb and said distal end of said suction socket, decreasing the air pressure to a negative pressure to draw said residual limb into said suction socket and increasing the air pressure to a positive pressure to expel said residual limb from said suction socket.

Count 3. A method for donning a suction suspension prosthesis, said prosthesis including a suction socket having an open proximal end for receiving a residual limb and a distal end, comprising:

(a) installing a valve means into said distal end of said suction socket, said valve means engaging a first end of a piece of tubing;

(b) lubricating said residual limb to obtain a lubricated limb;

(c) positioning said residual limb into said open proximal end of said suction socket; and

(d) drawing air through a second end of said tubing by means of a low pressure vacuum pump to create a negative pressure between said residual limb and said distal end of said suction socket such that said residual limb is pulled into full engagement within said suction socket.

Count 4. A method for doffing a suction suspension prosthesis, said prosthesis including a suction socket having a proximal end in which is received a residual limb and a distal end, comprising:

(a) installing a valve means into said distal end of said suction socket, said valve means engaging a piece of tubing; and

(b) introducing air through a second end of said tubing to create a positive air pressure between said residual limb and said distal end of said suction socket such that said residual limb is pushed out of said suction socket.

Pursuant to 37 C.F.R. §1.607(a)(3), it is submitted that all claims of the Layton Patent (claims 1-11) correspond to proposed Count 1. Proposed Count 1 is a substantial copy of claim 1 of the Layton Patent except that the method of proposed Count 1 has been broadened by replacing the word "and," between the words "socket" and "increasing," in line 7 of claim 1 of the Layton Patent, with the word --or--. Accordingly, proposed Count 1 recites that it includes the step of decreasing the air pressure to a negative pressure to draw the residual limb into the socket *or* increasing the air pressure to a positive pressure to expel the residual limb from the socket. It is submitted that proposed Count 1 is generic to all claims of the Layton Patent and that proposed Count 1 is patentable over the prior art of record.

Proposed Counts 2-4 are submitted as alternative or additional counts to the requested interference. Pursuant to 37 C.F.R. §1.607(a)(3), the claims of the Layton Patent corresponding to proposed Count 2 are claims 1-4; the claims of the Layton Patent corresponding to proposed Count 3 are claims 5-9; and the claims of the Layton Patent corresponding to proposed Count 4 are claims 10 and 11.

Proposed Count 2 is identical to claim 1 of the Layton Patent. Claims 2-4 of the Layton Patent each depend directly from claim 1 of the Layton Patent. Claim 2 of the Layton patent recites that the limb is lubricated before insertion into the socket. It is submitted that it is a conventional and clearly obvious process to lubricate a limb prior to insertion into a prosthetic limb socket, and claim 2 of the Layton Patent is obvious over, and hence, clearly corresponds to proposed Count 2. Claim 3 of the Layton Patent recites the desired negative air pressures used by the pump to draw the residual limb into the socket, and claim 4 of the Layton Patent recites the desired positive air pressures used by the pump to expel the residual limb from the socket. It is submitted that such recitations of desired air pressures would flow naturally from the teachings of claim 1 of the Layton Patent, and are thus obvious modifications from claim 1 of the Layton Patent. *In re Reese*, 129 U.S.P.Q. 402. Accordingly, it is submitted that claims 3 and 4 of the Layton Patent also correspond to proposed Count 2.

Proposed Count 3 is a substantial copy of claim 5 of the Layton Patent and corresponds to claims 5-9 of the Layton Patent. The only difference between proposed Count 3 and claim 5 of the Layton Patent, is that claim 5 of the Layton patent recites that the tubing for coupling the pump to the valve is "flexible;" while proposed Count 3 does not recite the tube as having any specific properties. It is submitted, however, that the use of a flexible pump tube is a conventional, well known and obvious expedient, and that an interference on the basis of proposed Count 3 is proper regardless of the flexibility of the tubing. Indeed, a person of ordinary skill would be more likely to use flexible tubing than inflexible tubing. Proposed Count 3 is also broader than claim 5 of the Layton Patent, and thus, contesting an interference on the basis of proposed Count 3 will not restrict Layton's access to his best proofs.

Claim 6 of the Layton Patent is dependent upon Claim 5 of the Layton Patent, and recites the desired negative air pressures used by the pump to draw the residual limb into the socket. It is submitted that Claim 6 of the Layton Patent corresponds to proposed Count 3 because the recitation of desired air pressure would flow naturally from the teachings of claim 5 of the Layton Patent, and is thus obvious. *In re Reese*, 129 U.S.P.Q. 402.

Claim 7 of the Layton Patent is dependent upon Claim 5 of the Layton Patent, and recites that the valve comprises a "quick release valve." It is submitted that Claim 7 of the Layton Patent corresponds to proposed Count 3 because the use of a quick release valve to releasably couple a pump to a valve is conventional, and is thus obvious.

Claim 8 of the Layton Patent is dependent upon claim 7 of the Layton Patent, and recites that the "quick release valve is connected to [the] valve body by use of an adaptor, [the] adaptor having an adaptor body for threadable coupling to [the] quick release valve, a stem for traversing [the] valve body, a sealing element circumferentially positioned about [the] stem, and an airway for fluid communication between [the] quick release valve and [the] valve body." It is submitted that claim 8 of the Layton Patent corresponds to proposed Count 3 because claim 8 of the Layton Patent recites a conventional and obvious structure for incorporating a quick release

valve into the prior art valve systems as discussed in the Background section of the present application (Page 2, line 4 to Page 3, line 15).

Claim 9 of the Layton Patent is dependent upon claim 5 of the Layton Patent, and recites that the pump comprises a "twin diaphragm vacuum pump." It is submitted that claim 9 of the Layton Patent should be designated to correspond to proposed Count 3 because claim 9 of the Layton Patent merely recites a commercially available, and thus obvious, pump mechanism.

Proposed Count 4 is a substantial copy of claim 10 of the Layton Patent and corresponds to claims 10 and 11 of the Layton Patent. The only difference between proposed Count 4 and claim 10 of the Layton Patent, is that claim 10 of the Layton patent recites that the tubing for coupling the pump to the valve is "flexible;" while proposed Count 4 does not recite the tube as having any specific properties. It is submitted, however, that the use of a flexible pump tube is conventional and well known, and as thus, an interference should be contested on the basis of proposed Count 4.

Claim 11 of the Layton Patent is dependent upon Claim 10 of the Layton Patent, and recites the desired positive air pressures used by the pump to push the residual limb out of the socket. It is submitted that Claim 11 of the Layton Patent corresponds to proposed Count 4 because the recitation of desired air pressure would flow naturally from the teachings of claim 10 of the Layton Patent, and is thus obvious. *In re Reese*, 129 U.S.P.Q. 402.

Pursuant to 37 C.F.R. §1.607(a)(4), the claims of the present application corresponding to proposed Count 1 are new claims 37-42; the claims of the present application corresponding to proposed Count 2 are new claims 38 and 39; the claims of the present application corresponding to proposed Count 3 are new claims 40 and 41; and the claim of the present application corresponding to proposed Count 4 is new claim 42.

New claim 37 is a substantial copy of claim 1 of the Layton Patent, except that in line 5 of new claim 37, between "socket" and "increasing," the word "and" has been replaced with

--or--. As discussed above, the replacement of “and” with “or” in this part of the claim substantially broadens the claim so as to make it generic to all claims of the Layton Patent. Likewise, new claim 37 is also generic to new claims 38-42. Pursuant to 37 C.F.R. §1.607(a)(5), new claim 37 may be specifically applied to applicant’s disclosure as follows:

Copied Claim	Applicant’s Disclosure
37. A method for donning and doffing a suspension prosthesis,	Page 11, line 31 - Page 12, line 1.
said prosthesis including a suction socket having an open proximal end for receiving a residual limb and a distal end,	Page 1, lines 15-21; Page 7, lines 5-8; and Original claim 5, lines 2-4.
comprising influencing air pressure between said residual limb and said distal end of said suction socket,	Page 6, lines 23-27; Page 12, lines 1-4; and Original claim 19, lines 1-16.
decreasing the air pressure to a negative pressure to draw said residual limb into said suction socket or	Page 12, lines 6-11.
increasing the air pressure to a positive pressure to expel said residual limb from said suction socket.	Page 12, lines 11-15.

New claim 38 is copied verbatim from claim 1 of the Layton Patent, and new claim 39 is copied verbatim from claim 2 of the Layton Patent. Pursuant to 37 C.F.R. §1.607(a)(5) new claims 38 and 39 may be specifically applied to applicant’s disclosure as follows:

Copied Claim	Applicant's Disclosure
38. A method for donning and doffing a suspension prosthesis,	Page 11, line 31 - Page 12, line 1.
said prosthesis including a suction socket having an open proximal end for receiving a residual limb and a distal end,	Page 1, lines 15-21; Page 7, lines 5-8; and Original claim 5, lines 2-4.
comprising influencing air pressure between said residual limb and said distal end of said suction socket,	Page 6, lines 23-27; Page 12, lines 1-4; and Original claim 19, lines 1-16.
decreasing the air pressure to a negative pressure to draw said residual limb into said suction socket and	Page 12, lines 6-11.
increasing the air pressure to a positive pressure to expel said residual limb from said suction socket.	Page 12, lines 11-15.

Copied Claim	Applicant's Disclosure
39. The method according to claim 38, further comprising	Id.
lubricating said residual limb prior to insertion of said residual limb into said suction socket.	Page 11, lines 2-8.

New claim 40 is substantially copied from claim 5 of the Layton Patent, and new claim 41 is copied verbatim from claim 7 of the Layton Patent. Pursuant to 37 C.F.R. §1.607(a)(5) new claims 40 and 41 may be specifically applied to applicant's disclosure as follows:

Copied Claim**Applicant's Disclosure**

40. A method for donning a suction suspension prosthesis,

Page 12, lines 6-9.

said prosthesis including a suction socket having an open proximal end for receiving a residual limb and a distal end, comprising:

Page 1, lines 15-21; Page 7, lines 5-8; and Original claim 5, lines 2-4.

- (a) installing a valve means into said distal end of said suction socket,

Page 5, lines 14-25; Page 9, lines 3-6; Page 9, line 29 to Page 10, line 8; Original claims 1 and 2; Original claim 15; and Original claim 19.

said valve means engaging a first end of a piece of tubing;

Page 9, lines 17-21.

- (b) lubricating said residual limb to obtain a lubricated limb;

Page 11, lines 2-8.

- (c) positioning said residual limb into said open proximal end of said suction socket; and

Page 12, lines 6-9.

- (d) drawing air through a second end of said tubing by means of a low pressure vacuum pump to create a negative pressure between said residual limb and said distal end of said suction socket such that said residual limb is pulled into full engagement within said suction socket.

Page 12, lines 9-11.

Copied Claim**Applicant's Disclosure**

41. The method according to claim 40,

Id.

wherein said valve means comprises a quick release valve for connection to a valve body.

Page 6, lines 23-25; Page 9, lines 8-10; Page 11, line 32 to page 12, line 1; Original claims 13 and 14.

The limitation excluded from new claim 40 that appears in claim 5 of the Layton Patent is the recitation that the tubing is "flexible." The applicant's disclosure does not state that the pump tube is flexible, yet it is submitted that the use of a flexible pump tube is conventional and well

known, and as thus, would be obvious. Accordingly, pursuant to 37 C.F.R. §1.601(n), applicant's invention as recited in new claim 40 and Layton's invention as recited in claim 5 of the Layton Patent are drawn to the same patentable invention.

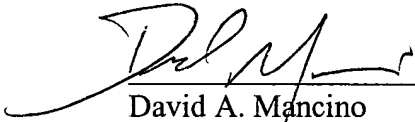
New claim 42 is substantially copied from claim 10 of the Layton Patent. Pursuant to 37 C.F.R. §1.607(a)(5) new claims 42 may be specifically applied to applicant's disclosure as follows:

Copied Claim	Applicant's Disclosure
42. A method for doffing a suction suspension prosthesis,	Page 12, lines 11-15.
said prosthesis including a suction socket having a proximal end in which is received a residual limb and a distal end, comprising:	Page 1, lines 15-21; Page 7, lines 5-8; Page 12, lines 11-15; and Original claim 5, lines 2-4.
(a) installing a valve means into said distal end of said suction socket,	Page 5, lines 14-25; Page 9, lines 3-6; Page 9, line 29 to Page 10, line 8; Original claims 1 and 2; Original claim 15; and Original claim 19.
said valve means engaging a first end of a piece of tubing; and	Page 9, lines 17-21.
(b) introducing air through a second end of said tubing to create a positive air pressure between said residual limb and said distal end of said suction socket such that said residual limb is pushed out of said suction socket.	Page 12, lines 11-15.

The limitation excluded from new claim 42 that appears in claim 10 of the Layton Patent is the recitation that the tubing is "flexible." The applicant's disclosure does not state that the pump tube is flexible, yet it is submitted that the use of a flexible pump tube is conventional and well known, and as thus, would be obvious. Accordingly, pursuant to 37 C.F.R. §1.601(n), applicant's invention as recited in new claim 42 and Layton's invention as recited in claim 10 of the Layton Patent are drawn to the same patentable invention.

In summary, the applicant requests that an interference be declared between the present application and U.S. Pat. No. 5,658,353 to Layton. In declaring the interference, all claims in the Layton Patent should be designated to correspond to the proposed counts and the present applicant should be the **senior party**.

Respectfully Submitted,



David A. Mancino
Reg. No. 39,289

THOMPSON, HINE & FLORY LLP
2000 Courthouse Plaza NE
P.O. Box 8801
Dayton, Ohio 45401-8801
(937) 443-6888

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